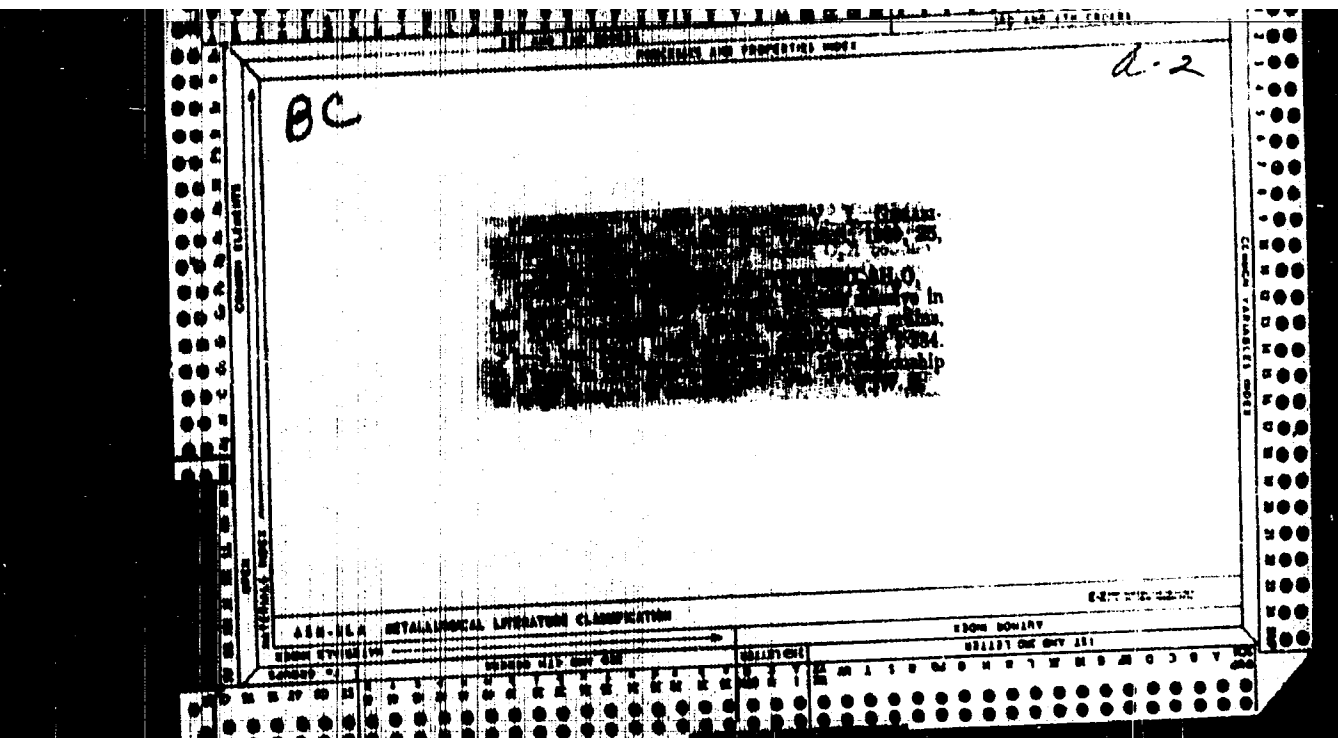
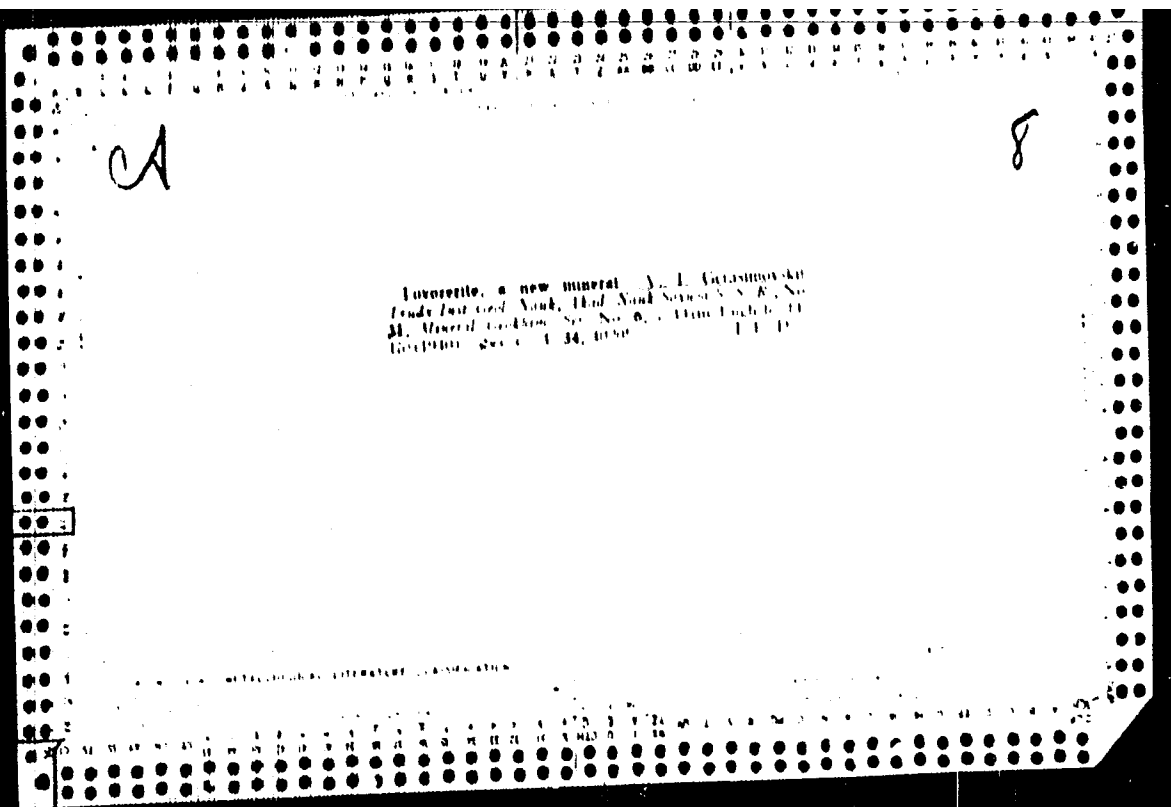




LIST AND NO. ORDER		PROCESSES AND PROPERTIES INDEX	
<p><b>Pegmatites of the Lovozero alkaline massive.</b> A. I. Gerasimovskii. <i>Trudy Inst. Geokhim. Nauk, Akad. Nauk S.S.S.R. 18, Mineral. Geokhim. Ser. No. 5, 1-44</i> (in English, 44, 5/1969). Good petrographic characteristics of the Lovozero alk. massive, types of pegmatites, secondary processes, minerals of pegmatite veins, and chemical elements of pegmatites are described. The area of the massive is covered chiefly with lavas and its various types. The pegmatites occur mostly among the rocks from which they are derived. The bulk of the pegmatites is characterized by the content of eudialyte and Na titanosilicates. The pegmatites are very close in mineralogical composition to those of the Khibiny alk. massive. Many minerals found in the pegmatites contain considerable quantities of Zr, Ti, Nb, P and rare earths. The reserves of eudialyte and loparite as sources for Zr, Nb and rare earths are large. 36 references. B. Z. Kamich</p>			
<p>182860 METALLURGICAL LITERATURE CLASSIFICATION</p>			







**Manganohumite** from the Lovozero alkaline massif, V. I. Gerasimovskii. *Izv. Inst. Geol. Akad. Nauk SSSR*, No. 21, Mineral. Azbuka, Ser. No. 6, 17-21 (in English), 21 (1960). Manganohumite occurs in the form of plates and thin tablets in rocks and pegmatites of the Lovozero alk. massif. Color is non-black and it is opaque. Cleavage is absent; fracture is conchoidal to uneven.  $H = 5.5$ , sp. gr. = 4.650. It is used

6C

A-1

1941 AND 1942 OBJECTS

PROCESSES AND PROPERTIES INDEX

Role of niobium in minerals of nepheline-syenite masses. V. I. Geraninovskii (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, 30, 820-821). Zr may occur either as cation in  $ZrSiO_4$  or as part of a complex anion, zirconio-silicate, depending on the conditions.  $ZrSiO_4$  is found in the more acid rocks (or those containing excess of alkali) and zirconio-silicates in a less acid environment. O. D. S.

ADD-554 METALLURGICAL LITERATURE CLASSIFICATION

1940-1941	1942-1943	1944-1945	1946-1947	1948-1949	1950-1951	1952-1953	1954-1955	1956-1957	1958-1959	1960-1961	1962-1963	1964-1965	1966-1967	1968-1969	1970-1971	1972-1973	1974-1975	1976-1977	1978-1979	1980-1981	1982-1983	1984-1985	1986-1987	1988-1989	1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013	2014-2015	2016-2017	2018-2019	2020-2021	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031	2032-2033	2034-2035	2036-2037	2038-2039	2040-2041	2042-2043	2044-2045	2046-2047	2048-2049	2050-2051	2052-2053	2054-2055	2056-2057	2058-2059	2060-2061	2062-2063	2064-2065	2066-2067	2068-2069	2070-2071	2072-2073	2074-2075	2076-2077	2078-2079	2080-2081	2082-2083	2084-2085	2086-2087	2088-2089	2090-2091	2092-2093	2094-2095	2096-2097	2098-2099	2100-2101	2102-2103	2104-2105	2106-2107	2108-2109	2110-2111	2112-2113	2114-2115	2116-2117	2118-2119	2120-2121	2122-2123	2124-2125	2126-2127	2128-2129	2130-2131	2132-2133	2134-2135	2136-2137	2138-2139	2140-2141	2142-2143	2144-2145	2146-2147	2148-2149	2150-2151	2152-2153	2154-2155	2156-2157	2158-2159	2160-2161	2162-2163	2164-2165	2166-2167	2168-2169	2170-2171	2172-2173	2174-2175	2176-2177	2178-2179	2180-2181	2182-2183	2184-2185	2186-2187	2188-2189	2190-2191	2192-2193	2194-2195	2196-2197	2198-2199	2200-2201	2202-2203	2204-2205	2206-2207	2208-2209	2210-2211	2212-2213	2214-2215	2216-2217	2218-2219	2220-2221	2222-2223	2224-2225	2226-2227	2228-2229	2230-2231	2232-2233	2234-2235	2236-2237	2238-2239	2240-2241	2242-2243	2244-2245	2246-2247	2248-2249	2250-2251	2252-2253	2254-2255	2256-2257	2258-2259	2260-2261	2262-2263	2264-2265	2266-2267	2268-2269	2270-2271	2272-2273	2274-2275	2276-2277	2278-2279	2280-2281	2282-2283	2284-2285	2286-2287	2288-2289	2290-2291	2292-2293	2294-2295	2296-2297	2298-2299	2300-2301	2302-2303	2304-2305	2306-2307	2308-2309	2310-2311	2312-2313	2314-2315	2316-2317	2318-2319	2320-2321	2322-2323	2324-2325	2326-2327	2328-2329	2330-2331	2332-2333	2334-2335	2336-2337	2338-2339	2340-2341	2342-2343	2344-2345	2346-2347	2348-2349	2350-2351	2352-2353	2354-2355	2356-2357	2358-2359	2360-2361	2362-2363	2364-2365	2366-2367	2368-2369	2370-2371	2372-2373	2374-2375	2376-2377	2378-2379	2380-2381	2382-2383	2384-2385	2386-2387	2388-2389	2390-2391	2392-2393	2394-2395	2396-2397	2398-2399	2400-2401	2402-2403	2404-2405	2406-2407	2408-2409	2410-2411	2412-2413	2414-2415	2416-2417	2418-2419	2420-2421	2422-2423	2424-2425	2426-2427	2428-2429	2430-2431	2432-2433	2434-2435	2436-2437	2438-2439	2440-2441	2442-2443	2444-2445	2446-2447	2448-2449	2450-2451	2452-2453	2454-2455	2456-2457	2458-2459	2460-2461	2462-2463	2464-2465	2466-2467	2468-2469	2470-2471	2472-2473	2474-2475	2476-2477	2478-2479	2480-2481	2482-2483	2484-2485	2486-2487	2488-2489	2490-2491	2492-2493	2494-2495	2496-2497	2498-2499	2500-2501	2502-2503	2504-2505	2506-2507	2508-2509	2510-2511	2512-2513	2514-2515	2516-2517	2518-2519	2520-2521	2522-2523	2524-2525	2526-2527	2528-2529	2530-2531	2532-2533	2534-2535	2536-2537	2538-2539	2540-2541	2542-2543	2544-2545	2546-2547	2548-2549	2550-2551	2552-2553	2554-2555	2556-2557	2558-2559	2560-2561	2562-2563	2564-2565	2566-2567	2568-2569	2570-2571	2572-2573	2574-2575	2576-2577	2578-2579	2580-2581	2582-2583	2584-2585	2586-2587	2588-2589	2590-2591	2592-2593	2594-2595	2596-2597	2598-2599	2600-2601	2602-2603	2604-2605	2606-2607	2608-2609	2610-2611	2612-2613	2614-2615	2616-2617	2618-2619	2620-2621	2622-2623	2624-2625	2626-2627	2628-2629	2630-2631	2632-2633	2634-2635	2636-2637	2638-2639	2640-2641	2642-2643	2644-2645	2646-2647	2648-2649	2650-2651	2652-2653	2654-2655	2656-2657	2658-2659	2660-2661	2662-2663	2664-2665	2666-2667	2668-2669	2670-2671	2672-2673	2674-2675	2676-2677	2678-2679	2680-2681	2682-2683	2684-2685	2686-2687	2688-2689	2690-2691	2692-2693	2694-2695	2696-2697	2698-2699	2700-2701	2702-2703	2704-2705	2706-2707	2708-2709	2710-2711	2712-2713	2714-2715	2716-2717	2718-2719	2720-2721	2722-2723	2724-2725	2726-2727	2728-2729	2730-2731	2732-2733	2734-2735	2736-2737	2738-2739	2740-2741	2742-2743	2744-2745	2746-2747	2748-2749	2750-2751	2752-2753	2754-2755	2756-2757	2758-2759	2760-2761	2762-2763	2764-2765	2766-2767	2768-2769	2770-2771	2772-2773	2774-2775	2776-2777	2778-2779	2780-2781	2782-2783	2784-2785	2786-2787	2788-2789	2790-2791	2792-2793	2794-2795	2796-2797	2798-2799	2800-2801	2802-2803	2804-2805	2806-2807	2808-2809	2810-2811	2812-2813	2814-2815	2816-2817	2818-2819	2820-2821	2822-2823	2824-2825	2826-2827	2828-2829	2830-2831	2832-2833	2834-2835	2836-2837	2838-2839	2840-2841	2842-2843	2844-2845	2846-2847	2848-2849	2850-2851	2852-2853	2854-2855	2856-2857	2858-2859	2860-2861	2862-2863	2864-2865	2866-2867	2868-2869	2870-2871	2872-2873	2874-2875	2876-2877	2878-2879	2880-2881	2882-2883	2884-2885	2886-2887	2888-2889	2890-2891	2892-2893	2894-2895	2896-2897	2898-2899	2900-2901	2902-2903	2904-2905	2906-2907	2908-2909	2910-2911	2912-2913	2914-2915	2916-2917	2918-2919	2920-2921	2922-2923	2924-2925	2926-2927	2928-2929	2930-2931	2932-2933	2934-2935	2936-2937	2938-2939	2940-2941	2942-2943	2944-2945	2946-2947	2948-2949	2950-2951	2952-2953	2954-2955	2956-2957	2958-2959	2960-2961	2962-2963	2964-2965	2966-2967	2968-2969	2970-2971	2972-2973	2974-2975	2976-2977	2978-2979	2980-2981	2982-2983	2984-2985	2986-2987	2988-2989	2990-2991	2992-2993	2994-2995	2996-2997	2998-2999	3000-3001	3002-3003	3004-3005	3006-3007	3008-3009	3010-3011	3012-3013	3014-3015	3016-3017	3018-3019	3020-3021	3022-3023	3024-3025	3026-3027	3028-3029	3030-3031	3032-3033	3034-3035	3036-3037	3038-3039	3040-3041	3042-3043	3044-3045	3046-3047	3048-3049	3050-3051	3052-3053	3054-3055	3056-3057	3058-3059	3060-3061	3062-3063	3064-3065	3066-3067	3068-3069	3070-3071	3072-3073	3074-3075	3076-3077	3078-3079	3080-3081	3082-3083	3084-3085	3086-3087	3088-3089	3090-3091	3092-3093	3094-3095	3096-3097	3098-3099	3100-3101	3102-3103	3104-3105	3106-3107	3108-3109	3110-3111	3112-3113	3114-3115	3116-3117	3118-3119	3120-3121	3122-3123	3124-3125	3126-3127	3128-3129	3130-3131	3132-3133	3134-3135	3136-3137	3138-3139	3140-3141	3142-3143	3144-3145	3146-3147	3148-3149	3150-3151	3152-3153	3154-3155	3156-3157	3158-3159	3160-3161	3162-3163	3164-3165	3166-3167	3168-3169	3170-3171	3172-3173	3174-3175	3176-3177	3178-3179	3180-3181	3182-3183	3184-3185	3186-3187	3188-3189	3190-3191	3192-3193	3194-3195	3196-3197	3198-3199	3200-3201	3202-3203	3204-3205	3206-3207	3208-3209	3210-3211	3212-3213	3214-3215	3216-3217	3218-3219	3220-3221	3222-3223	3224-3225	3226-3227	3228-3229	3230-3231	3232-3233	3234-3235	3236-3237	3238-3239	3240-3241	3242-3243	3244-3245	3246-3247	3248-3249	3250-3251	3252-3253	3254-3255	3256-3257	3258-3259	3260-3261	3262-3263	3264-3265	3266-3267	3268-3269	3270-3271	3272-3273	3274-3275	3276-3277	3278-3279	3280-3281	3282-3283	3284-3285	3286-3287	3288-3289	3290-3291	3292-3293	3294-3295	3296-3297	3298-3299	3300-3301	3302-3303	3304-3305	3306-3307	3308-3309	3310-3311	3312-3313	3314-3315	3316-3317	3318-3319	3320-3321	3322-3323	3324-3325	3326-3327	3328-3329	3330-3331	3332-3333	3334-3335	3336-3337	3338-3339	3340-3341	3342-3343	3344-3345	3346-3347	3348-3349	3350-3351	3352-3353	3354-3355	3356-3357	3358-3359	3360-3361	3362-3363	3364-3365	3366-3367	3368-3369	3370-3371	3372-3373	3374-3375	3376-3377	3378-3379	3380-3381	3382-3383	3384-3385	3386-3387	3388-3389	3390-3391	3392-3393	3394-3395	3396-3397	3398-3399	3400-3401	3402-3403	3404-3405	3406-3407	3408-3409	3410-3411	3412-3413	3414-3415	3416-3417	3418-3419	3420-3421	3422-3423	3424-3425	3426-3427	3428-3429	3430-3431	3432-3433	3434-3435	3436-3437	3438-3439	3440-3441	3442-3443	3444-3445	3446-3447	3448-3449	3450-3451	3452-3453	3454-3455	3456-3457	3458-3459	3460-3461	3462-3463	3464-3465	3466-3467	3468-3469	3470-3471	3472-3473	3474-3475	3476-3477	3478-3479	3480-3481	3482-3483	3484-3485	3486-3487	3488-3489	3490-3491	3492-3493	3494-3495	3496-3497	3498-3499	3500-3501	3502-3503	3504-3505	3506-3507	3508-3509	3510-3511	3512-3513	3514-3515	3516-3517	3518-3519	3520-3521	3522-3523	3524-3525	3526-3527	3528-3529	3530-3531	3532-3533	3534-3535	3536-3537	3538-3539	
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	--



15. 12. 1941  
14. 12. 1941  
Vilhannite from Lovozero (Lapland). V. I. Gerasimovskii (comp.  
rend. Acad. Sci. U.S.S.R., 1941, 82, 492—494). —Vilhannite (essenti-  
ally NaF) occurs in inclusions of leucosite as carmine-red grains.  
"mm 1-3263, "mm 1-3264, "mm 1-3268, "mm 1-3272. The X ray  
spectrum agrees with NaF. It is found associated with sodalite,  
sylvite and leucosite, and is probably widely distributed in the  
Lovozero and Chibiny masses. [ ] ]

Nordite, a new mineral of the Lovénite group. V. I. Gerashovskii (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, 22, 496-498). Nordite occurs as light-brown lamellae,  $a : b : c = 0.730 : 1 : 0.527$ . Cleavage is marked along (100); hardness 5-6, sp. gr. 3.430,  $n_x$  1.433-1.440,  $n_y$  1.419. X-Ray data show it to be rhombohedral. The empirical formula is  $2Na_2O \cdot 3CaO \cdot 3MgO \cdot 0.7(La, Di, Y)_2O_3 \cdot 8SiO_2$ . Of the individual rare earths, nordite contains  $La_2O_3$  8.66%,  $Ca_2O_3$  8.1%,  $Y_2O_3$  1.6%,  $Nd_2O_3$  1.98%. It is found in pigmatites between cordierite grains. L. I. J.

**Metaloparite**, a new mineral from the Lovozero Tundra. V. I. Gerasimovskii (*Compt. rend. Acad. Sci. U.R.S.S.*, 1941, **23**, 61-63). The mineral, which was discovered in the Lovozero alkaline massif (Kola peninsula), is a secondary mineral, closely resembling loparite. The physical and optical properties of the mineral are recorded, and an analysis is given. A. J. M.

1218. Rare Earths in Minerals, by I. B. Borovsky and V. I. Gerasimovsky. *Comptes Rendus De L'Academie Des Sciences De L'URSS* 49, 1945. 4 p. (In Russian).  
Quantitative analyses, with X-ray spectroscopic methods, of rare earths present in minerals found in the Soviet Union are discussed.

GERASIMOVSKY, V. I.

PA 4T97

USSR/Minerals - Identification  
Rare earths

1945

"Rare Earths in Minerals," I. B. Borovsky and V. I. Gerasimovsky, 4 pp

"CR Acad Sci" Vol XLIX, No 5

Quantitative analyses, with X-ray spectroscopic methods, of rare earths present in minerals found in the Soviet Union.

INT. AND EXT. NUMBER		PRECEDENCE AND PRIORITY NUMBER		NO. AND DATE RECEIVED	
CA				19	
Impskibul region—an important source of ceramic raw materials. V. I. Gerasimovskii; Razvedka Nedr 12, No. 4, 11-12(1948).—This region located on the northern shore of Lake Ladoga abounds in pegmatites suitable for the ceramic industry.					
M. Hosek					
ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION					
B-BETTERED NUMBER					
FROM SYNDICATE					
LIBRARY					
LIBRARY ONE ONLY TWO					
LIBRARY ONE ONLY THREE					
LIBRARY ONE ONLY FOUR					
LIBRARY ONE ONLY FIVE					
LIBRARY ONE ONLY SIX					
LIBRARY ONE ONLY SEVEN					
LIBRARY ONE ONLY EIGHT					
LIBRARY ONE ONLY NINE					
LIBRARY ONE ONLY TEN					
LIBRARY ONE ONLY ELEVEN					
LIBRARY ONE ONLY TWELVE					
LIBRARY ONE ONLY THIRTEEN					
LIBRARY ONE ONLY FOURTEEN					
LIBRARY ONE ONLY FIFTEEN					
LIBRARY ONE ONLY SIXTEEN					
LIBRARY ONE ONLY SEVENTEEN					
LIBRARY ONE ONLY EIGHTEEN					
LIBRARY ONE ONLY NINETEEN					
LIBRARY ONE ONLY TWENTY					
LIBRARY ONE ONLY TWENTYONE					
LIBRARY ONE ONLY TWENTYTWO					
LIBRARY ONE ONLY TWENTYTHREE					
LIBRARY ONE ONLY TWENTYFOUR					
LIBRARY ONE ONLY TWENTYFIVE					
LIBRARY ONE ONLY TWENTYSIX					
LIBRARY ONE ONLY TWENTYSEVEN					
LIBRARY ONE ONLY TWENTYEIGHT					
LIBRARY ONE ONLY TWENTYNINE					
LIBRARY ONE ONLY THIRTY					
LIBRARY ONE ONLY THIRTYONE					
LIBRARY ONE ONLY THIRTYTWO					
LIBRARY ONE ONLY THIRTYTHREE					
LIBRARY ONE ONLY THIRTYFOUR					
LIBRARY ONE ONLY THIRTYFIVE					
LIBRARY ONE ONLY THIRTYSIX					
LIBRARY ONE ONLY THIRTYSEVEN					
LIBRARY ONE ONLY THIRTYEIGHT					
LIBRARY ONE ONLY THIRTYNINE					
LIBRARY ONE ONLY FORTY					
LIBRARY ONE ONLY FORTYONE					
LIBRARY ONE ONLY FORTYTWO					
LIBRARY ONE ONLY FORTYTHREE					
LIBRARY ONE ONLY FORTYFOUR					
LIBRARY ONE ONLY FORTYFIVE					
LIBRARY ONE ONLY FORTYSIX					
LIBRARY ONE ONLY FORTYSEVEN					
LIBRARY ONE ONLY FORTYEIGHT					
LIBRARY ONE ONLY FORTYNINE					
LIBRARY ONE ONLY FIFTY					
LIBRARY ONE ONLY FIFTYONE					
LIBRARY ONE ONLY FIFTYTWO					
LIBRARY ONE ONLY FIFTYTHREE					
LIBRARY ONE ONLY FIFTYFOUR					
LIBRARY ONE ONLY FIFTYFIVE					
LIBRARY ONE ONLY FIFTYSIX					
LIBRARY ONE ONLY FIFTYSEVEN					
LIBRARY ONE ONLY FIFTYEIGHT					
LIBRARY ONE ONLY FIFTYNINE					
LIBRARY ONE ONLY SIXTY					
LIBRARY ONE ONLY SIXTYONE					
LIBRARY ONE ONLY SIXTYTWO					
LIBRARY ONE ONLY SIXTYTHREE					
LIBRARY ONE ONLY SIXTYFOUR					
LIBRARY ONE ONLY SIXTYFIVE					
LIBRARY ONE ONLY SIXTYSIX					
LIBRARY ONE ONLY SIXTYSEVEN					
LIBRARY ONE ONLY SIXTYEIGHT					
LIBRARY ONE ONLY SIXTYNINE					
LIBRARY ONE ONLY SEVENTY					
LIBRARY ONE ONLY SEVENTYONE					
LIBRARY ONE ONLY SEVENTYTWO					
LIBRARY ONE ONLY SEVENTYTHREE					
LIBRARY ONE ONLY SEVENTYFOUR					
LIBRARY ONE ONLY SEVENTYFIVE					
LIBRARY ONE ONLY SEVENTYSIX					
LIBRARY ONE ONLY SEVENTYSEVEN					
LIBRARY ONE ONLY SEVENTYEIGHT					
LIBRARY ONE ONLY SEVENTYNINE					
LIBRARY ONE ONLY EIGHTY					
LIBRARY ONE ONLY EIGHTYONE					
LIBRARY ONE ONLY EIGHTYTWO					
LIBRARY ONE ONLY EIGHTYTHREE					
LIBRARY ONE ONLY EIGHTYFOUR					
LIBRARY ONE ONLY EIGHTYFIVE					
LIBRARY ONE ONLY EIGHTYSIX					
LIBRARY ONE ONLY EIGHTYSEVEN					
LIBRARY ONE ONLY EIGHTYEIGHT					
LIBRARY ONE ONLY EIGHTYNINE					
LIBRARY ONE ONLY NINETY					
LIBRARY ONE ONLY NINETYONE					
LIBRARY ONE ONLY NINETYTWO					
LIBRARY ONE ONLY NINETYTHREE					
LIBRARY ONE ONLY NINETYFOUR					
LIBRARY ONE ONLY NINETYFIVE					
LIBRARY ONE ONLY NINETYSIX					
LIBRARY ONE ONLY NINETYSEVEN					
LIBRARY ONE ONLY NINETYEIGHT					
LIBRARY ONE ONLY NINETYNINE					
LIBRARY ONE ONLY HUNDRED					
LIBRARY ONE ONLY HUNDREDONE					
LIBRARY ONE ONLY HUNDRETTWO					
LIBRARY ONE ONLY HUNDRETHREE					
LIBRARY ONE ONLY HUNDRETFOUR					
LIBRARY ONE ONLY HUNDRETFIVE					
LIBRARY ONE ONLY HUNDRETSIX					
LIBRARY ONE ONLY HUNDRETYSEVEN					
LIBRARY ONE ONLY HUNDRETYEIGHT					
LIBRARY ONE ONLY HUNDRETYNINE					
LIBRARY ONE ONLY ONEHUNDRED					
LIBRARY ONE ONLY ONEHUNDREDONE					
LIBRARY ONE ONLY ONEHUNDRETTWO					
LIBRARY ONE ONLY ONEHUNDRETHREE					
LIBRARY ONE ONLY ONEHUNDRETFOUR					
LIBRARY ONE ONLY ONEHUNDRETFIVE					
LIBRARY ONE ONLY ONEHUNDRETSIX					
LIBRARY ONE ONLY ONEHUNDRETYSEVEN					
LIBRARY ONE ONLY ONEHUNDRETYEIGHT					
LIBRARY ONE ONLY ONEHUNDRETYNINE					
LIBRARY ONE ONLY TWOHUNDRED					
LIBRARY ONE ONLY TWOHUNDREDONE					
LIBRARY ONE ONLY TWOHUNDRETTWO					
LIBRARY ONE ONLY TWOHUNDRETHREE					
LIBRARY ONE ONLY TWOHUNDRETFOUR					
LIBRARY ONE ONLY TWOHUNDRETFIVE					
LIBRARY ONE ONLY TWOHUNDRETSIX					
LIBRARY ONE ONLY TWOHUNDRETYSEVEN					
LIBRARY ONE ONLY TWOHUNDRETYEIGHT					
LIBRARY ONE ONLY TWOHUNDRETYNINE					
LIBRARY ONE ONLY THREEHUNDRED					
LIBRARY ONE ONLY THREEHUNDREDONE					
LIBRARY ONE ONLY THREEHUNDRETTWO					
LIBRARY ONE ONLY THREEHUNDRETHREE					
LIBRARY ONE ONLY THREEHUNDRETFOUR					
LIBRARY ONE ONLY THREEHUNDRETFIVE					
LIBRARY ONE ONLY THREEHUNDRETSIX					
LIBRARY ONE ONLY THREEHUNDRETYSEVEN					
LIBRARY ONE ONLY THREEHUNDRETYEIGHT					
LIBRARY ONE ONLY THREEHUNDRETYNINE					
LIBRARY ONE ONLY FOURHUNDRED					
LIBRARY ONE ONLY FOURHUNDREDONE					
LIBRARY ONE ONLY FOURHUNDRETTWO					
LIBRARY ONE ONLY FOURHUNDRETHREE					
LIBRARY ONE ONLY FOURHUNDRETFOUR					
LIBRARY ONE ONLY FOURHUNDRETFIVE					
LIBRARY ONE ONLY FOURHUNDRETSIX					
LIBRARY ONE ONLY FOURHUNDRETYSEVEN					
LIBRARY ONE ONLY FOURHUNDRETYEIGHT					
LIBRARY ONE ONLY FOURHUNDRETYNINE					
LIBRARY ONE ONLY FIVEHUNDRED					
LIBRARY ONE ONLY FIVEHUNDREDONE					
LIBRARY ONE ONLY FIVEHUNDRETTWO					
LIBRARY ONE ONLY FIVEHUNDRETHREE					
LIBRARY ONE ONLY FIVEHUNDRETFOUR					

GERASIMOVSKIY, V. I.

"Rare Earths in Minerals," Dokl. AN SSSR, 49, No.5, 1947

GERASIMOVSKIY, V. I.

"Structure of the Luavrite Complex of Rocks in the Lovozerskiy Mountain Range,"  
Dokl. AN SSSR, 56, No.9, 1947



CA

8

Lomonosovite, a new mineral. V. I. Gerasimovskii.  
Doklady Akad. Nauk S.S.S.R. 70, 83-8 (1980).—Lomonosovite, scaly aggregates, without distinct crystal forms, is

dark brown to black, sometimes changing to violet-rose colored parts similar to murmanite; the luster is glassy or adamantine on cleavage, glassy to fatty on fractures. The mineral is brittle, hardness 3 to 4, d. 3.13, easily fused to a brown glass bead in the oxidizing, to greenish yellow in the reducing, flame, but colorless after cooling. It is optically neg.;  $\gamma = 1.778$ ,  $\delta = 1.750$ ,  $\alpha = 1.670$ ;  $2V = 36^\circ$ . Pleochroism is distinct, chiefly between brown and rose-colored hues. Sections parallel to the cleavage plane sometimes show polysynthetic twinning lamellae. The symmetry is monoclinic or triclinic. The dark-brown variety contains 12.8%  $P_2O_5$  and 26%  $Na_2O$ ; the rose-colored variety, 6 to 8%  $P_2O_5$ , 15.7 to 20.3%  $Na_2O$ , a trace of  $K_2O$ ,  $TKO_2$  up to 26.8%, and  $H_2O$  up to about 6%. The chem. compn. shows a series of transition types between murmanite,  $Na_2TiSi_2O_8 \cdot H_2O$ , and lomonosovite,  $Na_2TiSi_2O_8 \cdot Na_2P_2O_7$ , as the end members (theory of I. D. Berneman-Marynskevich). The  $Na_2P_2O_7$  in lomonosovite is easily leached out by distil.  $H_2O$  even at room temp. The salt found after the evapn. of the leached soln is  $Na_2P_2O_7 \cdot 7H_2O$ . The heating curve of lomonosovite shows at  $900^\circ$  the endothermic effect of the fusion of  $Na_2P_2O_7$ . The genesis of lomonosovite in pegmatites of large nepheline, syenite complexes, in paragenesis with hackmanite, ussingite, lamprophyllite, eudialyte, arfvedsonite, microcline, and ramsayite is very characteristic. Secondary minerals are argente, cordite, neptunite, sphalerite, and molybdenite. Also the paragenesis with villiaumite ( $NaCl$ ) is very typical. If the residual magmatic solns. are high in water, lomonosovite is replaced by murmanite, leaching of  $Na_2P_2O_7$  from lomonosovite can form this latter mineral. W. Fittel

1957

C A

P

**Belyankinite, a new mineral.** V. I. Gerasimovskii and M. E. Kazakova. *Doklady Akad. Nauk S.S.S.R.* 71, 925-7 (1950).—Details of the cupferron method are given, especially for the sepn. of Fe, Al, Ti, Zr, Nb, and Ta. The results suggest the complex formula  $2\text{CaO} \cdot 12\text{TiO}_2 \cdot 0.5\text{Nb}_2\text{O}_5 \cdot 2\text{ZrO}_2 \cdot 3\text{H}_2\text{O}$ ; by spectral analysis the presence of Hf, Pb, and traces of Cu are additionally established. The mineral is readily dissolved in HCl, HNO<sub>3</sub>, and H<sub>2</sub>SO<sub>4</sub>. The new mineral is observed in dense, plate-tabular yellow-brown aggregates. The following characteristics were observed: hardness 2-3; brittle with excellent tabular cleavage; sp. gr. 2.33 to 2.40; infusible in the blowpipe flame; optically neg., elongation pos.,  $2V$  21 to 25°,  $n$  about 1.740,  $g = 1.777$  (av.); pleochroism distinct: dark brown to reddish brown. The mineral is orthorhombic or monoclinic. It is often altered along fractures. The x-ray powder diagram (Cu and Fe radiation) did not show distinct interference lines; the Laue method gave some spots which establish the cryst. state of the mineral. The heating curve shows two endothermic dehydration effects at 150° and 400 to 450°, and an exothermic reaction at 750°. Belyankinite is found in pegmatites in foyaites. It occurs with microcline, epidote, nepheline, and aegirite. The nepheline is usually altered to zeolites. Belyankinite is often included in aegirite, and sometimes also in microcline; it is, therefore, older than the aegirite. In its exterior parts, the pegmatite contains abundant eudialyte, with black aegirite, tamsayite, and lamprophyllite. Characteristic Christmas-tree-like or honeycomb-like cavities suggest the previous crystal of villiaumite, which was later leached away by hydrothermal solus. Genetically, belyankinite is classified with niitmanite and kumonowite. W. Fichtl

GERASIMOVSKY, V. I.

2

Typomorphic minerals of nepheline syenites. V. I. Gerasimovskiy, *Vopr. Prirodoz. i Mineral., Akad. Nauk S.S.S.R.*, 1977(1980). In agpaite magmas the ratio  $(Na_2O + K_2O):Al_2O_3$  is above 1; in miaskitic rocks it is below 1. In agpaite rocks  $Na_2O$  is much above  $K_2O$ ,  $Fe_2O_3$  above  $FeO$ ,  $Ca$  above  $F$ ; in miaskitic rocks  $Na_2O$  is equal to, or below  $K_2O$ ,  $Fe_2O_3$  equal to, or below  $FeO$ ,  $F$  above  $Ca$ .  $Zr$ ,  $Ti$  silicates are enriched in agpaite; nepheline, sodalite, urtite, and arfvedsonite are typical for these, and absent in miaskites in which, however, cancrinite appears in the place of sodalite. Biotite, lepidomelane micas which are typical for miaskites, are absent in agpaite. An extensive table shows side by side the characteristic (typomorphic) minerals in agpaite for the following elements:  $Zr$ ,  $Ti$ ,  $Nb$ ,  $Ca$ ,  $Be$ , rare earth elements,  $Mg$ ,  $Ba$ ,  $Fe$ ,  $Al$ ,  $Na$ ,  $K$ ,  $Li$ ,  $F$ ,  $Cl$ ,  $P$ , and  $C$ . Minerals which occur in both series and are therefore not typomorphic are the  $K$ - $Na$  feldspars albite, microcline, andite. Agpaite and miaskitic rock types are often associated in one and the same alk. massif. Intermediate rocks may even appear, with  $R_2O/Al_2O_3$  approx. 1. Typomorphic for such hybrids are eudialyte and spene; sodalite + cancrinite; eudialyte + mormonite + nespolite. W. B.

2

20

GERASIMOVSKIY, V. I.

"Niobium, Tantalum, and Titano-Magnetite Deposits in the USSR" (Nioby i Tantal  
v SSSR), Priroda, No.7, July 1954

Translation U-2720, 15 Dec 52

LAVROVICH, Nikolay Stepanovich; BRITAYEV, M.D., redaktor; GERASIMOVSKIY, V.I., redaktor; YERSHOV, A.D., redaktor; KONSTANTINOV, M.M.; NIFONTOV, R.V., glavnyy redaktor; SAAKYAN, P.S., redaktor; SMIRNOV, V.I., redaktor; SOLOV'YEV, D.V., redaktor; CHERNOSVITOV, Yu.L., redaktor; SOSHNIKOVA, K.S., redaktor vypuska; SERGEYEVA, N.A., redaktor izdatel'stva; AVHRKIYNEVA, T.A., tekhnicheskiiy redaktor.

[Fluorspar; (fluorite).] Flavikovyi shpat (fliuorit). Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр, 1956. 133 p. (Otsenka mestorozhdenii pri poiskakh i razvedkakh, no.16).  
(Fluorite) (MLRA 10:9)

GERASIMOVSKIY, V.I.

SUBJECT USSR / PHYSICS  
 AUTHOR GERASIMOVSKIY, V.I.  
 TITLE The Minerals of Uranium.  
 PERIODICAL Atomnaja Energija, 1, fasc. 4, 118-130 (1956)  
 Issued: 19.10.1956

CARD 1 / 2

PA - 1521

Here those uranium minerals which are at present known are described. A table contains the chemical formula, color, syngony, hardness, specific weight, uranium content, and genesis of the following uranium minerals (which are the most spread):

Oxides: uranite, nasturan, remanent and regenerated platinum black (= pitchblend), uranothorianite.

Hydroxides: Becquerelite, curite.

Silicates: uranophan (uranotyl), beta-uranophan, kazolite, coffinite, nenadkevite.

Sulphates: uranopylite, zippeite.

Carbonates: uranothallite (lybeite).

Sulphate-Carbonates: Schroeckingerite.

Phosphates: phosphuranylite, autunite, torbernite, metatorbernite, pearsonite.

Arsenates: uranospinite, zeinerite, metazeinerite.

Vanadates: carnotite, tuyamunite.

Compound Oxides: davidite, brannerite. (These two minerals are titanates).

The following are titano-tantalo-niobates: hatchettovite, elswortite, ferguso-nite, euxenite, polykras, samarkite, betafite, ampangabeite.

Atomnaja Energija, 1, fasc. 4, 118-130 (1956) CARD 2 / 2 PA - 1521

Organic Compounds: tucholite, karburan. These two compounds are mixtures of hydrocarbons with Th and U.

In the text of this paper also the more rare uranium minerals and their occurrence were discussed.

Enumeration is not complete; see Energia Nucleare, 3, No 2 (April 1956).

INSTITUTION:

GERASIMOVSKIY, V.I.

Mineralogical characteristics of uranium mineralization in the  
oxidation zone of the Shinkolobwe deposits. Geokhimiya no.7:73-  
76 '56. (MLRA 10:1)

1. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo  
Akademii nauk SSSR, Moskva.  
(Shinkolobwe--Uranium ores)



89-12-6/29

AUTHOR: Gerasimovskiy, V. I.

TITLE: Occurrence of Uranium in Different Rocks (O formakh nakhozheniya urana v gornyykh porodakh)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 12, pp. 525-529 (USSR)

ABSTRACT: The problem of the form of uranium in rocks is of utmost significance for the settling of the conditions of formation of uranium deposits.  
In 1910 this problem was dealt with by Vernadskiy for the first time.  
Based on the latest researches the following can be said:  
1) The most different uranium minerals are formed (oxides, hydroxides, sulphates, carbonates, silicates, phosphates, arsenates, vanadates).  
2) Uranium in consequence of isomorphous mixtures comes into the crystal lattice of non-uranium minerals.  
3) In scattered condition uranium comes into the rock, namely:  
    a) in absorbed form (ion absorption)  
    b) in dissolved condition in the rock water  
After the formation of rock an exchange of the total content of uranium between the different mentioned phases takes place.  
There are 2 tables, and 11 Slavic references.

Card 1/2

Occurrence of Uranium in Different Rocks

89-12-6/29

SUBMITTED: October 29, 1956

AVAILABLE: Library of Congress

Card 2/2

GERASIMOVSKIY, V.I.; TURANSKAYA, N.V.

Agpaitic nepheline-syenite minerals with a high lanthanum and cerium content in the Lovozero massif (Kola Peninsula). Geokhimiya no.4:334-336 (MIRA 12:3)  
' 57.

1. V.I. Vernadskiy Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero region--Nepheline syenite)  
(Lanthanum) (Cerium)

GERASIMOVSKIY, V.I.; KAKHANA, M.M.; RODIONOVA, L.M.

Niobium and tantalum ratio in agpaitic rocks of the Lovozero alkaline  
massif. Geokhimiia no.5:417-419 ' 57. (MIRA 12:3)

1. V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, USSR, Moscow.  
(Lovozero region--Feldspar) (Niobium) (Tantalum)

5(2)

Abstracts sent free. Entries published & available only in Russian.  
References: elementary elements; analysis, analysis, analysis (see Part  
Elements); extraction, analysis and application) Moscow, 1958, 331 p., 2,200 copies printed.

Bury, M.: Dr. E. Z. Ryabikov, Professor, Editorial Board; L. P. Alimarin,  
 Corresponding Member, Academy of Sciences; L. E. Znosarskiy, Doctor  
 of Chemical Sciences; B. S. Kuliyev, Candidate of Technical Sciences;  
 Y. I. Ruznetsov, Doctor of Chemical Sciences; M. M. Izergin, Candidate of  
 Chemical Sciences; and Yu. B. Gilyarevich, Candidate of Chemical Sciences.  
 Mts. of Publishing House: B. I. Trifonov and T. G. Levit; Subst. M.: S. G.  
 Shcherbakov.

**PURPOSE:** This book is intended for scientists, chemists, teachers and students of higher educational institutions, chemical and industrial engineers and other persons concerned with the attraction, preparation, use, or study of rare earth elements.

[illegible]

**ALL OF COURSE:**

- 29 *Chandrasekhar, P. V.* (Institute of Geochemistry and Analytical Chemistry, Soviet V. V. Vvedensky All Union), Geochemistry of Rare Earth Elements
- 30 *Fellows, M. L.* (Solubility Critical Level), M. Fellows All Union (Soviet Academy of Sciences Institute of Chemistry), Methods for Fractionation in the Specific Weight of Heavy Alloys
- 31 *Shostakovskiy, A. P., and P. S. Petlin* (Olefinat) (State Rare Metals Scientific Research Institute), Separation of Cerium from Rare Earth Elements and Obtaining It in the Pure State
- 32 *Erilyayev, B. V., and G. P. Kosharenko* (State Rare Metals Scientific Research Institute), Application of Heavy Sulphates for the Separation of Rare Earth Elements into Subgroups and Preparation of High Percentage Concentrates of Some Elements of the Titanium Subgroup
- 33 *Erilyayev, B. V., and G. P. Kosharenko*, Application of Complex-forming Substances for the Separation of Rare Earth Elements by Fractional Precipitation of Heavy Sulphates

GERASIMOVSKIY, V.I.

Symposium dedicated to the memory of V.I. Vernadskii on the  
95th anniversary of his birth [with summary in English]. *Geokhimiia*  
no.3:283-284 '58. (MIRA 11:7)  
(Vernadskii, Vladimir Ivanovich, 1863-1945)

1(5)  
**AUTHORS:** Gerasimovskiy, V. I., Lebedev, V. I. SOV/7-58-6-5/16  
**TITLE:** On the Strontium - Calcium Ratio in Rocks of the Lovozerskiy Massif (O sootnoshenii strontsiya i kal'tsiya v porodakh Lovozerskogo massiva)  
**PERIODICAL:** Geokhimiya, 1958, Nr 6, pp 553 - 557 (USSR)  
**ABSTRACT:** The authors investigated the nepheline syenites of the Lovozerskiy Massif (Kol'skiy poluostrov). The Sr and Ca content was flame photometrically determined (oxyacetylene torch, double glass monochromator, photo multiplier PMT-17, rectifier VZ-1). The massif was intrusively formed in several phases and consists of the following rocks: 1. Complex of porphyritic, poecilitic and other nepheline syenites; 2. Complex of lujavrites, foyaites and urtites; 3. Complex of eudialyte bearing lujavrites and porphyritic lujavrites which are in connection with the former mentioned, tavites (tavity) and poecilitic sodalite syenites; 4. Complex of young dike rocks. Rocks of the three first mentioned complexes were investigated (Table 2). Their content is between 0.008 and 1.75% SrO and 0.03 and 11.0% CaO. There is no direct connection

Card 1/3

On the Strontium - Calcium Ratio in Rocks of the  
Lovozerkiy massif

SOV/7-58-6-5/16

although they have some maxima and minima in common (Diagram). Apart from Ca Sr is also substituted for K. Furthermore, Sr is genetically related with Na (Table 3). The most important minerals are: Lamprophyllite, belovite, apatite, nordite, loparite, eudialyte, erikite, diaschistic rock, microcline (analyzed by V. A. Moleva), lovocerite. Investigations showed the following facts: Nepheline syenites of the Lovozerkiy massif have a comparatively high Sr/Ca ratio (0.033 to 0.541). Poecilitic sodalite syenites do not belong to the same intrusion phase as poecilitic nepheline syenites, as it was frequently assumed. The strontium content of miaskite rocks (first complex) is higher than that of agpaitic rocks (second and third complex). There are 1 figure, 3 tables, and 5 references, 2 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V.I. Vernadskiy, AS USSR, Moscow)

Card 2/3



3(0)

AUTHORS: Gerasimovskiy, V. I., Tuzova, A. M., SOV/7-58-8-5/8  
Shevaleyevskiy, I. D.

TITLE: On the Zirconium-Hafnium Ratio in Rocks of the **Lovozerskiy** Massif (O tsirkoniyevo-gafniyevom sootnoshenii v porodakh Lovozerskogo massiva)

PERIODICAL: Geokhimiya, 1958, Nr 8, pp 743 - 748 (USSR)

ABSTRACT: 48 rock samples from three magmatic complexes of the Lovozerskiy massif, Kola peninsula (Lovozerskiy massiv, Kol'skiy poluostrov) were examined. The zirconium and hafnium content was determined by the X-ray spectrometric method. The results are recorded in a table. The zirconium and hafnium content ranges from 0.07 to 2.31%  $ZrO_2$  and from 0.015 to 0.057%  $HfO_2$ , while the variations of the zirconium-hafnium ratio are insignificant. Zr and Hf are concentrated in later magmatic complexes: 0.167% in the first, 0.290% in the second and 1.49%  $ZrO_2$  in the third. Agpaitic rocks have a higher Zr and Hf content than miassic rocks, but no relation between sodium-potassium and zirconium-

Card 1/2

On the Zirconium-Hafnium Ratio in Rocks of the  
Lovozerskiy Massif

SOV/7-58-8-5/8

hafnium contents could be observed. There are 1 figure,  
1 table, and 11 references, 6 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernads-  
kogo AN SSSR, Moskva (Institute for Geochemistry and Ana-  
lytical Chemistry imeni V. I. Vernadskiy AS USSR, Moscow)

SUBMITTED: July 15, 1958

Card 2/2

GERASIMOVSKIY, Vasilii Ivanovich; SHCHERBINA, V.V., prof., otv.red.;  
BOYARSKIY, V.A., red.isd-va; YEGOROVA, N.F., tekhn.red.

[Deposits of uranium in foreign countries] Nestorozhdenia  
urana zarubezhnykh stran. Moskva, Izd-vo Akad.nauk SSSR,  
1959. 140 p. (MIRA 12:12)  
(Uranium ores)

5(2)

PHASE I BOOK EXPLOITATION

SOV/2402

Akademiya nauk SSSR. Institut geokhimi i analiticheskoy khimii

Redkozemel'nyye elementy; polucheniye, analiz, primeneniye (Rare Earth Elements; Production, Analysis, and Use) Moscow, Izd-vo AN SSSR, 1959. 331 p.  
5,000 copies printed.

Resp. Ed.: D. I. Ryabchikov, Professor; Eds. of Publishing House: D. N. Trifanov and T.G. Levi; Tech. Ed.: S. G. Markovich; Editorial Board: I. P. Alimarin, Corresponding Member, USSR Academy of Sciences, I. N. Zaozerskiy, Doctor of Chemical Sciences, R. V. Kotlyarov, Candidate of Chemical Sciences, V. I. Kuznetsov, Doctor of Chemical Sciences, M. M. Senyavin, Candidate of Chemical Sciences, and Yu. S. Sklyarenko, Candidate of Chemical Sciences.

PURPOSE: This book is intended for chemists in general and for geochemists and analytical chemists in particular.

COVERAGE: This collection of articles consists of reports presented at the Rare Earth Elements Symposium held in June 1956 at the Institute of Geochemistry

Card 1/9

## Rare Earth Elements (Cont.)

SOV/2402

and Analytical Chemistry imeni V. I. Vernadskiy. The book may be divided into three sections: the characteristics, uses and production of rare earth elements (REE); the methods of analyzing REE; and the application of individual rare earth elements and REE mixtures in the glass and metallurgical industries, and their use as catalysts. Considerable space is devoted to the application of ion-exchange chromatography in the production of pure forms of all rare earth elements. The combinations of this method with other methods in separating REE on an industrial scale are discussed by D. I. Ryabchikov, Yu. S. Sklyarenko, and M. M. Senyavina. Chemical methods of separating REE compounds are discussed by I. N. Zaozerskiy (who is said to be the first in the USSR to develop methods of processing REE), V. P. Kotlyarov, Z. F. Andreyeva, A. V. Nikolayev, and G. P. Aleksandrov. Quantitative X-ray spectral analytical methods are described by E. Ye. Vaynshteyn, and chemical methods of analysis by I. P. Alimarin and F. I. Pavlotskaya. The determinations of REE impurities in pure products and atomic materials are discussed at length in three articles by A. N. Zaydel' and his associates. All articles are accompanied by photographs, diagrams, tables, and bibliographic references.

## TABLE OF CONTENTS:

Foreword

3

Card 2/9

Rare Earth Elements (Cont.)	SOV/2402	
Vinogradov, A. P. Utilization of Rare Earth Elements		5
Ryabchikov, D. I., Yu. S. Sklyarenko and M. M. Senyavin. Rare Earth Elements and General Methods of Obtaining Them		9
Gerasimovskiy, V. I. Geochemistry of Rare Earth Elements		29
Volkova, M. I. Causes for the Variation in the Specific Gravity of Khibiny Apatites		42
Zaozerskiy, I. N., and P. N. Patkin. Separation of Cerium From Rare Earth Elements (REE) and Its Preparation in Pure Form		48
Kotlyarov, P. V., and G. P. Kozhenyako. Use of Binary Sulfate in Separating REE Into Sub-Groups and in the Production of High Content Concentrates of Certain Elements of the Ittrium Sub-Group		55
Kotlyarov, P. V., and G. P. Kozhenyako. Use of Complex Forming Substances in Separating REE by the Method of Fractional Precipitation of Binary Sulfates		62

Card 3/9

Rare Earth Elements (Cont.)

SOV/2402

Nikolayev, A. V., A. A. Sorokina, and A. S. Maslennikova. Chemical Research and the Separation of REE (Production of Ce and La. Concentrates of Pr and Nd of the Heavy Rare Earth Elements)	68
Andreyeva, Z. F. Separation of the Elements of the Ittrium Sub-Group by Basicity	76
Andreyeva, Z. F., and P. N. Patkin. Production of Pure Ittrium	80
Aleksandrov, G. P. Nickel-Nitrite Complexes and Their Utilization in Separating the Total Mass of REE Into Sub-Groups	84
Senyavin, M. M., F. D. Iosefovich. Large Scale Chromatographic Separation of REE Mixtures	91
Andreyeva, Z. F., T. V. Kishchenko, N. V. Bredenfel'd, and O. I. Rozhdestvenskaya. Trilon B in an Ion-Exchange Separation of the Rarer Earth Elements	100
Andreyeva, Z. F., and A. S. Kostygov. Characteristics of Trilon A and Trilon B in an Ion-Exchange Separation of Elements of the Cerium Sub-Group	108

Card 4/9

Rare Earth Elements (Cont.)

SOV/2402

- Martynenko, L. I. Certain Problems of Chromatographic Separation of REE 112
- Dodonov, Ya. Ya., V. P. Khranov, V. S. Kolosova. Process of the Separation of Elements of the Cerium Sub-Group by NSK Cationite 121
- Cherneva, Ye. P., N. N. Tunitskiy, and V. V. Nekrasov. Separation of REE by the Counter Flow Chromatography Method 129
- Kolosova, G. M., and M. M. Senyavin. Separation of REE by Anionites 138
- Sklyarenko, S. I., I. E. Krause, and V. A. Morozova. Comparative Evaluation of Electrochemical Methods of Producing Itrbium 143
- Troitskiy, K. V. Study of the Method of Separating Radioisotopes on Paper Filters for the Purpose of Obtaining  $Ce^{144}$  Without a Carrier 151
- Alimarin, I. P., and F. I. Pavlotskaya. The Separation of Rare Earth Elements in the Form of Oxalates and Fluorides in the Presence of Large Quantities of Other Elements 162

Card 5/9



Rare Earth Elements (Cont.)

SOV/2402

Zolotavin, V. L., L. K. Ponomareva. A Rapid Method of Determining Cerium in Loparite	176
Ambrozhiy, M. N. On the Problem of the Chemical Control of Compound Purity of Rare Earth Elements of the Cerium Sub-Group	179
Ambrozhiy, M. N., and Ye. F. Lushnikova. On the Problem of a Qualitative Determination of Itterbium and Samarium	186
Poluektov, N. S. On the Reaction of the Salts of Rare Earth Elements With Rhodizonic Acid	190
Kuznetsov, V.I., and Ye. V. Mitrofanova. Chemical Control in the Separation of Rare Earth Elements of the Ittrium Sub-Group	192
Poluektov, N. S., R. S. Lauer, and R. Ya. Yagnyatinskaya. The Application of Distributive Chromatography on Paper for an Approximate Determination of the Composition of Rare Earth Elements	199

Card 6/9

Rare Earth Elements (Cont.)

SOV/2402

Polyektov, N.S. and M.P. Nikonova. Fluorescent Determination of Small Quantities of Europium 208

Panasyuk, V. I., and R. A. Yaroshevich. On the Problem of an Accelerated Method of Determining the Content of Ferric Oxide in a KL-20 Preparation 214

Vaynshteyn, E. Ye., I. P. Shtauberg, and A. T. Mosal'skiy. The Process of Applying the X-Ray Spectral Method of Analysis in Controlling Technological Processes in Producing Individual Rare Earth Elements 217

Zaydel', A. N., N. I. Kaliteyevskiy, and A. N. Razumovskiy. Spectrochemical Determination of Gd, Eu, and Sm in Atomic Materials. Communication I. Principle of the Method and Its Application to the Analysis of Berillium 239

Zaydel', A. N., N. I. Kaliteyevskiy, A. N. Razumovskiy, and P. P. Yakimova. Spectrochemical Determination of Gd, Eu, and Sm in Atomic Materials. Communication II. Analysis of Thorium and Uranium 251

Card 7/9

Rare Earth Elements (Cont.)

SOV/2402

- Zaydel', A. N., and A. A. Lipovskiy. Spectrochemical Determination of Gd, Eu, and Sm in Atomic Materials. Communication III. Analysis of Zirconium and Bismuth on Gd 258
- Grishina, T. I. Determining Small Admixtures of REE in Purified REE by the Method of Emission Spectral Analysis 266
- Peshkova, V. M., M. I. Gromova, I. P. Yefimov, and N. A. Kanayev. Spectrophotometric Investigation of Complex Compounds of Rare Earth Elements 277
- Dneprovskiy, I. S. Applying the Scintillation Spectrometer in Analyzing Binary Mixtures of Rare Earth Elements 284
- Bondarev, K. T., and V. A. Dubrovskiy. Certain Problems in the Use of Rare Earth Elements in the Glass Industry 290
- Tsoy, R. I., Yu. M. Tyurin, and Yu. A. Brodskiy. Process of the Use of Polirite in Polishing Glass on a Conveyer at the Plant im. F. E. Dzerzhinskiy 295

Card 8/9

Rare Earth Elements (Cont.)

SOV/2402

Savitskiy, Ye. M., and V. F. Terekhova. Study of the Microstructure and Physical-Mechanical Properties of Rare Earth Elements and Their Alloys 299

Tolstopyatova, A. A., and A. A. Balandin. Rare Earth Elements as Catalysts in Organic Chemistry. Cerium, Lanthanum and Samarium Oxides 307

Levshin, V. L., M. A. Konstantinova, and Z. A. Trapeznikova. The Use of Rare Earth Elements in the Chemistry of Luminophores 314

Tikhova, N. M., and V. A. Blekhina. Use of Rare Earth Metals in Alloying Magnesium Cast Alloys 323

AVAILABLE: Library of Congress

Card 9/9

MM/fal  
9-9-59

VLASOV, Kuz'ma Alekseyevich; KUZ'MENKO, Mariya Vasil'yevna; YESS'KOVA,  
Yevdokiya Mikhaylovna; ~~GERASIMOVSKIY, V.I., doktor geologo-~~  
~~mineralogicheskikh nauk, otv.red.;~~ ~~GODOVIKOVA, L.A., red.12d-va;~~  
~~MARUMI, Ye.V., tekhn.red.;~~ KASHINA, P.S., tekhn.red.

[Lovozero alkali massif; rocks, pegmatites, mineralogy, geo-  
chemistry, and genesis] Lovozerskii shchelochnoi massiv; porody,  
pegmatity, mineralogiia, geokhimiia i genezis. Moskva, Izd-vo  
Akad.nauk SSSR, 1959. 623 p. (MIRA 12:12)  
(Lovozero Tundras--Rocks, Igneous)

3(8), 3(0)

SOV/7-59-1-7/14

AUTHORS: Gerasimovskiy, V. I., Lebedev, V. I.

TITLE: On the Distribution of Rubidium and Lithium in the Rocks of  
the Lovozerskiy Massif (O rasprostraneni rubidiya i litiya v  
porodakh Lovozerskogo massiva)

PERIODICAL: Geokhimiya, 1959, Nr 1, pp 60-63 (USSR)

ABSTRACT: The distribution of rubidium and lithium in the nepheline  
syenites of the Lovozerskiy Massif (Kola Peninsula) was inves-  
tigated. This intrusion consists of 4 stages containing the  
following rocks: 1) Evenly grained, porphyritic, poikilitic,  
and other varieties of nepheline syenite. 2) Lujavrites,  
foyaite, and urtite. 3) Eudialitic lujavrites, in connection  
with porphyritic lujavrites, tawite, and poikilitic sodalite  
syenites. 4) Complex of dike-rocks of recent formation. From  
the first complex (miaraditic) 4 samples, from the second com-  
plex (agpaitic) 16 samples, and from the third complex (also  
agpaitic) 9 samples were investigated.  $\text{Na}_2\text{O}$ ,  $\text{K}_2\text{O}$ ,  $\text{Li}_2\text{O}$  and  
 $\text{Rb}_2\text{O}$  contents were analysed (Table). Lithium and rubidium  
were photometrically determined. The amounts vary greatly,  
 $\text{Rb}_2\text{O}$  between 0.0014 and 0.045%, and  $\text{Li}_2\text{O}$  between 0.0004 and

Card 1/2

SOV/7-59-1-7/14

On the Distribution of Rubidium and Lithium in the Rocks of the Lovozerskiy Massif

0.0320%. This may be explained by the great variations in the minerals occurring. There is no direct relation between the rubidium and potassium contents or between the lithium and magnesium contents. Rubidium and lithium were accumulated towards the end of the magmatic development in the rocks of the third stage. Lithium appears as characteristic element of the Lovozerskiy Massif. There are 1 table and 3 references, 1 of which is Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo  
AN SSSR, Moskva  
(Institute of Geochemistry and Analytical Chemistry imeni  
V. I. Vernadskiy, AS USSR, Moscow)

SUBMITTED: July 29, 1958

Card 2/2

SOV/7-59-5-7/14

AUTHORS: Gerasimovskiy, V. I., Tazova, A. M., Borisenok, L. A.,  
Rasskazova, V. S.

TITLE: Gallium in the Rocks of the Lovozero Alkaline Massif (Galliy  
v porodakh Lovozerskogo shchelochnogo massiva)

PERIODICAL: Geokhimiya, 1959, Nr 5, pp 449 - 454 (USSR)

ABSTRACT: Gallium was determined by the extraction with rhodamine B  
without previous separation of the other elements (method  
according to reference 4). The results are given in a large  
table (Table 1), arranged according to the four intrusion  
phases of the massif. Furthermore, the results of the spectro-  
scopic gallium determination and the aluminum content are  
given. The aluminum determinations were carried out by Yu. B.  
Kholina. The Ga- and Al-values are given in a diagram as well.  
Another table (Table 2) gives the gallium content of indivi-  
dual minerals. The gallium contents fluctuate between 3 and  
 $10 \cdot 10^{-3}\%$ ,  $6 \cdot 10^{-3}\%$  is the average for the whole massif. This  
is more than the usual content of the nepheline syenites. The  
third intrusion phase has the highest gallium content. Gallium  
is enriched in the later phases, compared to aluminum. Gallium

Card 1/2



Gallium in the Rocks of the Lovozero Alkaline Massif SOV/7-59-5-7/14

is able to enter into the crystal lattice for aluminum as well as for trivalent iron, e.g. in agirine. There are 1 figure, 2 tables, and 6 references, 5 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR, Moscow)

SUBMITTED: April 8, 1959

Card 2/2

21 (1), 3 (8)

AUTHOR: Gerasimovskiy, V. I.

SOV/89-7-1-3/26

TITLE: Characteristic Features of the Mineralogy of Uranium  
(Kharakternyye osobennosti mineralogiicheskogo)

PERIODICAL: Atomnaya energiya, 1959, Vol 7, No 1, pp 47 - 56 (USSR)

ABSTRACT: On the basis of foreign and Russian papers, a survey was given, which dealt with the following characteristic features of uranium mineralogy: 1. All known uranium- and uraniferous minerals are oxygen carriers. 2. In minerals, uranium occurs only in the quadri- or hexavalent state. 3. A large part of the uranium occurrence in the crust of the earth is concentrated in minerals which are not uraniferous, the uranium occurring as isomorphic admixtures to other elements as e.g. thorium, zirconium, rare earths, etc. 4. Uranium and uraniferous minerals form in the course of the various mineral-forming processes. 5. Radioactivity is a characteristic feature of uranium and uraniferous minerals. There are 37 references, 25 of which are Soviet.

SUBMITTED: October 4, 1958

Card 1/1

GERASIMOVSKIY, V.I., prof.

Geochemistry of the rare earth elements. Priroda 48 no.6:19-26  
Je '59. (MIRA 12:5)

1. Institut geokhimii im. V.I. Vernadskogo AN SSSR, Moskva.  
(Rare earths)

GERASIMOVSKIY, V. I.; LEBEDEV, V. I.

Cesium concentration in rocks of the Lovozero massif. Geokhimiya  
no.6:545-546 '60. (MIRA 13:10)

1. Institut geokhimii i analiticheskoy khimii im. V.I.Vernadskogo  
AN SSSR, Moskva.

(Lovozero tundras--Cesium)

GERASIMOVSKIY, V.I.; NESMEYANOVA, L.I.

Distribution of lead and zinc in rocks of the Lovozero Massif.  
Geokhimiia no.7:590-593 '60. (MIRA 13:11)

I. V.I. Vernadskiy Institute of Geochemistry and Analytical  
Chemistry, Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero Tundras--Rocks, Igneous)  
(Lead) (Zinc)

. GERASIMOVSKIY, V.I.; VENKINA, V.A.

Niobium tantalum ratio in minerals of the Lovozero Massif. Geokhimiia  
no.8:697-700 '60. (MIRA 14:1)

1. V.I.Vernadskiy Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero tundras--Mineralogy) (Niobium)  
(Tantalum)

GERASIMOVSKIY, V. I.

"Geochemistry of rare elements of the Lovorzero alkaline massif"

Paper submitted at the International Geological Congress XXI Session  
1960 (Reports of Soviet Geologists) Problem No. 1, 15-24 Aug. 61

GERASIMOVSKIY, V.I.; KHITROV, V.G.

Geochemistry of boron in nepheline syenites of the Lovozero Massif  
Geokhimiya no.6:535-537 '61. (MIRA 14:6)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo  
AN SSSR i Vseroyuznyy nauchno-issledovatel'skiy institut mineral'-  
nogo syr'ya, Moskva.  
(Lovozero Tundras--Nepheline syenite)  
(Boron)



GERASIMOVSKIY, V.I.; POLYAKOV, A.I.; FEYGIN, Ya.M.

Structure of the differentiated leucite-foyaite-urtite rock  
complex of the Lovozero Massif. Dokl. AN SSSR 136 no. 3:700-  
703 Ja '61. (MIRA 14:2)

1. Institut geokhimii i analiticheskoy khimii imeni V.F.  
Vernadskogo. Predstavleno akademikom A.P. Vinogradovym.  
(Lovozero tundras--Nepheline syenite)

SOLODOV, Nikolay Alekseyevich; VLASOV, K.A., glav. red.; GERASIMOVSKIY, V.I., doktor geol.-miner. nauk, otv. red.; PERSHINA, Ye.G., red. izd-va; SHEVCHENKO, G.N., tekhn. red.; RYLINA, Yu.V., tekhn. red.

[Internal structure and geochemistry of rare-metal granite pegmatites] Vnutrennee stroenie i geokhimiya redkometal'nykh granitnykh pegmatitov. Moskva, Izd-vo Akad. nauk SSSR, 1962. 233 p. (MIRA 16:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Vlasov). (Pegmatites)

GERASIMOVSKIY, V.I.; RASSKAZOVA, V.S.

Distribution of thallium in nepheline syenites of the Lovozero  
Tundras (Kola Peninsula). Geokhimiia no.3:243-248 '62.

(MIRA 15:4)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Lovozero Tundras—Thallium) (Lovozero Tundras—Nepheline syenite)

GERASIMOVSKIY, V.I.

Mineralogy of uranium. Min. sbor. no.16:343-358 '62.  
(MIRA 16:10)

1. Institut geokhimii i analiticheskoy khimii AN SSSR, Moskva.  
(Uranium)

GERASIMOVSKIY, V.I.

Keldyshite, a new mineral. Dokl. AN SSSR 142 no.4:916-  
918 F '62. (MIRA 15:2)

1. Institut geokhimii i analiticheskoy khimii im. V.I.  
Vernadskogo AN SSSR. Predstavleno akademikom A.P.Vinogradovym.  
(Lovozero Tundras—Zirconium silicates)

GERASIMOVSKIY, V.I.; POLYAKOV, A.I.

Sphene-amphibole iolite-melteigite from the Lovozero massif.  
Dokl. AN SSSR 143 no.5:1179-1181 Ap '62. (MIRA 15:4)

1. Institut geokhimii i analiticheskoy khimii im. V. I.  
Vernadskogo AN SSSR. Predstavleno akademikom A.P.Vinogradovym.  
(Lovozero tundras--Minerals)

VINOGRADOV, A.P., akademik, otv. red.; BARANOV, V.I., red.; BARSUKOV,  
V.L., red.; BEUS, A.A., red.; VALYASHKO, M.G., red.;  
GERASIMOVSKIY, V.I., red.; KORZHINSKIY, D.S., red.; RONOY,  
A.B., red.; TUGARINOV, A.I., red.; KHITAROV, N.I., red.;  
SHCHERBINA, V.V., red.; TARASOV, L.S., red. izd-va; DOROKHINA,  
I.N., tekhn. red.

[Chemistry of the earth's crust] Khimiya zemnoi kory; trudy.  
Moskva, Izd-vo Akad.nauk. Vol.1. 1963. 430 p. (MIRA 16:3)

1. Geokhimicheskaya konferentsiya, posvyashchennaya stoletiyu  
so dnya rozhdeniya akademika V.I.Vernadskogo, Moscow, 1963.  
(Geochemistry)

V.I. GERASIMOVSKIY (USSR)

"The geochemical features of agpaitic nepheline-syenites."

Report presented at the Conference on Chemistry of the Earth's Crust,  
Moscow, 14-19 Mar 63.



SHCHERBINA, V.V.; NAUMOV, G.B.; MAKAROV, Ye.S.; GERASIMOVSKIY, V.I.;  
YERMOLAYEV, N.P.; TARASOV, L.S.; TUGARINOV, A.I.; BARSUKOV,  
Vik.L.; SOKOLOVA, N.T.; KOCHENOV, A.V.; GERMANOV, A.I.;  
ZNAMENSKIY, V.L., red.isd-vaz; VINOGRAOV, A.P., akademik, red;  
POLYAKOVA, T.V., tekhn.red.

[Essential features of uranium geochemistry]; Osnovnye cherty  
geokhimii urana. Pod red. A.P. Vinogradova. Moskva, Izd-vo  
AN SSSR, 1963. 350 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy  
khimii.

(Uranium)

SEMENOV, Yevgeniy Ivanovich; VLASOV, K.A., glav. red.;  
GERASIMOVSKIY, V.I., doktor geol.-min. nauk, otv.  
red.; TARASOV, L.S., red.izd-va; PRUSAKOVA, T.A.,  
tekhn. red.; RUS'KOVA, O.M., tekhn. red.

[Rare-earth mineralogy; mineralogy, genetic types of  
mineralization and basic characteristics of the geo-  
chemistry of rare-earth elements] Mineralogiia redkikh  
zemel'; mineralogiia, geneticheskie tipy mineralizatsii  
i osnovnye cherty geokhimii redkozemel'nykh elementov.  
Moskva, Izd-vo AN SSSR, 1963. 411 p. (MIRA 17:2)

1.Chlen-korrespondent AN SSSR (for Vlasov).

GERASIMOVSKIY, Y.I.; BELYAYEV, Yu.I.

Chromium, nickel, vanadium, and copper contents in alkali rocks  
of the Kola Peninsula. Geokhimiia no.1:23-34 Ja '63.  
(MIRA 16:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Kola Peninsula--Rocks, Igneous--Analysis) (Kola Peninsula--Metals)

GERASIMOVSKIY, V.I.

Geochemistry of fluorine in nepheline syenites. Geokhimiia no.3:  
237-244. Mr '63. (MIRA 16:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry,  
Academy of Sciences, U.S.S.R., Moscow.  
(Fluorine) (Nepheline syenites) (Geochemistry)

GERASIMOVSKIY, V.I.

Unusual memory and erudition. Och.po ist.geol.znan. no.11:63-64  
'63. (MIRA 16:7)

(Vernadskii, Vladimir Ivanovich, 1863-1945)

GERASIMOVSKIY, V.I.

Founder of the mineralogy and geochemistry of uranium. Och.po  
ist.geol.znan. no.11:99-106 '63. (MIRA 16:7)  
(Vernadskii, Vladimir Ivanovich, 1863-1945)

GERASIMOVSKIY, V.I.; SEMENOV, Ye.I.; SIFERBERG, V.V.

Kuz'na Alekseevich Vlasov, 1905-1964: obituary. Geokhimiia  
no.12:1332-1333 D '64. (MIRA 18:8)

GERASIMOVSKIY, V.I.

Mineral resources of India. Zap. Vses. min. ob-va 93 no.4:  
487-492 '64 (MIRA 1882)



GENERAL INFORMATION

L 50199-65 EPA(m)-2 / EWT(m) / EPT(n)-2 / T / EWP(t) / EWP(b) / EWA(c) Pu-4

IJP(c) GVB/ES/JD/WW/JG

UR/553.061:546.79

AN5014982

BOOK EXPLOITATION

Batulin, S. G.; Golovin, YE. A.; Zelenova, O. I.; Kashirtseva, M. V.;  
Komarova, G. V.; Kondrat'yeva, I. A.; Lisitsin, A. K.; Perel'man,  
A. I.; Sindel'nikova, V. D.; Chernikov, A. A.; Shmariovich, YE. M.

Exogenous epigenetic deposits of uranium; formation conditions  
(Eksonennyye epigeneticheskiye mestorozhdeniya urana; usloviya  
obrazovaniya). Moscow, Atomizdat, 1965. 321 p. illus., biblio.  
Errata slip inserted. 1100 copies printed.

TOPIC TAGS: deposit formation, epigenetic theory, exodiagenetic  
deposit, surface uranium accumulation, uranium bituminous deposit,  
uranium deposit, uranium, nuclear fuel. 19

PURPOSE AND COVERAGE: This book is intended for readers specializing  
in the geology of ore deposits, in particular for those concerned  
with atomic raw materials, and also for students of higher-education  
institutions. In the book, for the first time in Soviet and  
foreign literatures, the epigenetic theory of uranium-deposit  
formation is expounded. Many Soviet and foreign source materials

Cord 1/4

L-50199-65  
AM5014982

13

have been used in this book, and some of the investigations carried out by the present authors are published in this book for the first time. Several names of Soviet scientists working in this field are mentioned. V. A. Uspenskiy collaborated on Ch. I, and M. A. Viselkina on Ch. III. The authors thank A. A. Saukov, deceased, Corresponding Member Academy of Sciences USSR, and F. I. Vol'fon, D. G. Sapozhnikov, V. I. Gerasimovskiy, M. P. Stralkin, G. S. Gritsayenko, and I. P. Kushnarev, Doctors of Geologico-Mineralogic Sciences; V. I. Danchev, Candidate of Geologico-Mineralogic Sciences, and N. A. Volekovykh. There are about 12 pages of references of which about 3/4 are Soviet.

TABLE OF CONTENTS [abridged]:

Introduction -- 4

Ch. I. Epigenetic processes in hypergenesis zone -- 9

Ch. II. Chemistry and crystallochemistry of uranium compounds -- 22

Card 2/4

L 50199-65  
AM5014982

- Ch. III. Associations of nonoxidized uranium minerals in epigenetic deposits -- 37
- Ch. IV. Uranium in surface and ground waters -- 48
- Ch. V. Uranium in stratal waters -- 57
- Ch. VI. Classification of exogenous uranium deposits -- 83
- Ch. VII. Exodiagenetic deposits (Type 5) -- 113
- Ch. VIII. Deposits of Oxygenous sheet oxidation (Type 6) -- 133
- Ch. IX. Deposits of oxygen-free oxidation (Type 7). Deposits in oil-bearing carbonate rocks -- 180
- Ch. X. Uranium-bituminous deposits in nonmetamorphosed sedimentary rocks -- 215

Card 3/4

1. 50199-63

AM5014982

Ch. XI. On surface uranium accumulations in regions with arid climate -- 232

Ch. XII. Zone of oxidation in epigenetic deposits -- 239

Conclusion -- 275

References -- 309

AVAILABLE: Library of Congress

SUB CODE: ES

SUBMITTED: 04Feb65

NO REF SOV: 188

OTHER: 118

Card 4/4

GERASIMOVSKIY, V.I.; PAVLENKO, L.I.; NESMEYANOVA, L.I.

Geochemistry of molybdenum in nepheline syenites. Geokhimiia  
no.1:9-15 Ja '65. (MIRA 18:4)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo  
AN SSSR, Moskva.

CHASINOVATI, U.I.

Twenty-Second Session of the International Geological Congress.  
Geokhimiia no.4:497-498. 1965. (MIRA 12:7)

GERASIMOVSKIY, V.I., doktor geol.-mineral. nauk

Expedition of geologists to Greenland. Vest. AN SSSR 34 no.1:  
65-68 Ja '65. (MIRA 18:2)

GERASIMOVSKIY, V.I.; KARPUSHINA, V.A.

Relationship of niobium to tantalum in igneous rocks. Geokhimiya no.6;  
757-758 Je '65. (MIRA 18:7)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN  
SSSR, Moskva.



GERASIMOVSKIY, V.I.

Special features of the mineralogy of the Jlimaussag Massif.  
Zap. Vses. min. ob-va. 94 no.4:444-447 '65. (MIRA 18:9)

GERASIMOVSKY, V.I.; PAVLENKO, I.I.; PLEKHAVAL, I.I. . . .

Geochemistry of beryllium in nepheline syenites. (Russian) No. 51  
562-573 My '65. (Vol. 18.2)

1. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo  
AN SSSR, Moskva.

GERASIMOVSKIY, V.I.; SHEVALMYEVSKIY, I.D.

On the zirconium - hafnium ratio in zirconium minerals of the  
Lovozero massif [with summary in English]. Geokhimiya no.8:696-698  
'57. (MIRA 11:2)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo  
AN SSSR, Moskva.

(Lovozero, Lake region--Zirconium ores)  
(Hafnium)

GKRASINOVSKIY, V.V.

Geochemistry and mineralogy of nepheline syenite intrusions. Geokhimiya no.5:61-74 '56. (MLRA 10:1)

1. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo  
Akademii nauk SSSR, Moskva,  
(Nepheline syenite)

OLBASHPOVSKIY, V.V.

Basnaesite and parisite from the northern part of the Lake Baikal  
region. Trudy Min. muz. no.15:194-202 '64.

(MIRA 17:11)

GERASIMOVSKIY, V.V.

Tainiolita from carbonate formations and albitite. Trudy Min.muz.  
no.16:215-218 '65. (MIRA 18:8)

GERASIMISEV, V.I.

Character of selective pulverizing of a drilled core in some  
types of pyrite and complex ore deposits and a method of defining  
it. Razved.i okh.nedr 28 no.1:43-47 Ja '62. (MIRA 15:3)

1. Belousovskiy rudnik.  
(Core drilling) (Altai Mountains--Ores--Sampling and  
estimation)

MILYKH, Anatoliy Filippovich; NAZAROV, Fedor Nikolayevich; GERASIMUK, G.N.,  
spets. red.; KALMYK, V.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Planning of design and research operations in construction] Planirovaniye proektno-izyskatel'nykh rabot v stroitel'stve. Moskva,  
Gos. izd-vo planovo-ekon. lit-ry pri Gosekonomsoвете SSSR, 1961.  
72 p. (MIRA 14:7)

(Building research)



PARAIL, Vladimir Alekseyevich, kand. tekhn. nauk, dotsent; GERASIMYAK,  
Rostislav Pavlovich, aspirant

Some requirements of the electric drives of the hoisting mechanisms of cranes. Izv. vys. ucheb. zav.; elektromekh. 7 no.8:  
953-957 '64. (MIRA 17:10)

1. Kafedra elektroprivoda i avtomatizatsii promyshlennykh ustanovok Odesskogo politekhnicheskogo instituta.

PARAIL, V.A., kand. tekhn. nauk, dotsent; GERASIMYAK, R.P., inzh.

Determining the minimum static moment of the lifting  
mechanisms of a crane. Vest. mashinostr. 45 no. 6:23-25  
Ag '65. (MIRA 18:12)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; OGANESYAN, A.N.; AKOPYAN, N.Ye.; GERASIMYAN,  
D.A.; KHECHUMYAN, L.Kh.

Derivatives of p-alkoxybenzoic acids. Report No.21: Some cyclo-  
hexylalkylaminoalkyl esters of p-butoxybenzoic acids. Izv. AN  
Arm. SSR. Khim nauki 16 no.2:163-174 '63 (MIRA 17:8)

1. Institut tonkoy organicheskoy khimii AN ArmSSR.

ACC NR: AP7003844

(1, N)

SOURCE CODE: UR/0122/67/000/001/0037/0039

AUTHOR: Gerasimyak, R. P. (Engineer)

ORG: none

TITLE: Calculation of the cable load of a crane

SOURCE: Vestnik mashinostroyeniya, no. 1, 1967, 37-39

TOPIC TAGS: crane, connecting cable, motor, forced vibration, transient vibration, differential equation system/ MT 11 6 motor, MTK motor

ABSTRACT: The transient processes arising from the electromagnetic moments of the drive motor of a crane were analyzed for the dynamic forces which can cause overloading of the cable. The crane with a two-step cylindrical reducer and a normal load on the cable was reduced to an effective system of motor-shaft-drum with the equivalent parameters for each component. The differential equation describing the action of the system was transformed to a fourth order nonhomogeneous differential equation. For its solution, an electromagnetic moment of an asynchronous motor with acceleration was taken in the form of a simplified starting moment. By calculating the effects of various resistors in the rotor circuit of the MT-11-6 motor, it was found that the highest moment peak occurred at the lowest resistance. All studies were carried out for a short-circuited motor, showing that the maximum force in the cable was larger at the small perturbing frequency. At the start, the oscillation frequency of the

Card 1/2

UDC 621.877.075.604.06.065.7.001.001

ACC NR: AP7003844

electromagnetic moments of the motor equaled the power supply frequency and decreased with acceleration. Studies and tests for cranes with motors MTK-51-8 and MTK-41-8 showed that the overloading is caused chiefly by the constant component of the motor moment, the periodic component adding only 0.5--1%. The peaks in a balanced crane can be calculated after neglecting the periodic part because the frequency does not transmit the effect to the load. Other components can be similarly analyzed. Orig. art. has: 1 table, 2 figures, and 11 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001

Card 2/2

GERASIMYAK, R.P., inzh.

Technical and economic indices of nonbalanced electric drive  
networks of hoist mechanisms. Elektrotehnika 36 no.6:33-35  
Je '65. (MIRA 1887)

GERASIMOV, V. G.

"Treatment of Skin Cancer with Radioactive Cobalt." Cand Med Sci, Central  
Sci Res Inst of Roentgenology and Radiology, Leningrad, 1953. (EZ Biol, No 4,  
Feb 55)

SO: Sum. No. 531, 28 Aug 55 - Survey of Scientific and Technical Dissertations  
Defended at USSR Higher Educational Institutions (1)

SAMVELYAN, V.M.; GERASIMYAN, D.A.

Prevention of experimental hyperkinesias by cholinolytic compounds from the group of diethylaminopropyl esters of diphenylalkoxyacetic acid. Izv. AN Arm. SSR. Biol. nauki 16 no.12:11-18 D '63. (MIRA 17:2)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.



USSR/Farm Animals - Poultry

Q

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69420

Author : Gerasimyan, E.A., Astsatryan, N.M.

Inst : Armenian Scientific Research Institute of Animal Husbandry and Veterinary Medicine

Title : On the Standardization of Silage from Corncocks in the Rations of Hens

Orig Pub : Byul. nauchno-tekhn. inform. Arm. n.-i. in-ta zhivotnovodstva in veterinarii, 1957, No 1, 20-22

Abstract : It was noted that feeding 40 g of silage daily, per head, during 2½ months to hens weighing 1.2 kg had an adverse effect on their egg production. The author assumes that the harmful influence of such a quantity of silage was caused by a considerable content of organic acids in the silage. It is recommended to include in the rations of

Card 1/2

USSR/Farm Animals - Poultry

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69420

laying hens 20 g of silage from corn cobs daily, per head.  
-- A.D. Musin

Card 2/2

- 62 -

GERASIMOV L. I.

USSR/Farm Animals. Small Horned Cattle

Q-3

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50009

Author : ~~Gerasimov L. I.~~ Mikhailova Z.F.

Inst : Armenian Scientific Research Institute of Animal Husbandry  
and Veterinary Sciences.

Title : The Effects of Rations with Variegated Grass Contents Upon  
the Food Digestibility in Lactating Cows.

Orig Pub : Tr. Arm. n.-i. in-ty zhivotnovodstva i veterinarii, 1957,  
2, 153-164

Abstract : One group of cows received a diet consisting of 90 percent of  
grass and 10 percent of concentrates, and another group re-  
ceived 70 percent, 20 percent, and 10 percent respectively  
of cotton plant peeling. The protein content was the same  
in all rations. Digestibility of the first diet was higher  
with respect of organic substances by 6.39 percent, with  
respect to proteins by 6.55 percent, and with respect to  
cellulose by 7.53 percent.

Cord : 1/1 .

GRASIMYUK, A. V. --"Calculation of Arch Bridges for the USSR." Min. of Higher Education USSR. Kiev Construction Engineering Inst. Chair of Construction Mechanics. Kiev, 1964. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhnyy letopis'  
No 2, 1966.